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## FULTON COUNTY

### (Fulton County Water Service Area Map)

- Estimated 1999 population of 7,500--94% on public water
- Estimated 2020 population of 7,200--98% on public water
- 130 miles of water lines, with plans for 10 additional miles
- Estimated funding needs for public water 2000-2005--\$3,465,000
- Estimated funding needs for public water 2006-2020--\$404,000

Fulton County had an estimated population of 7,514 (3,152 households) in 1999 with a projected population of 7,155 (3,104 households) in 2020. Public water is provided to about 3,200 customers, about 94 percent of the county's residents. The remainder of the county is served primarily by private domestic water wells. About 85 new households will be placed on public water through line extensions in 2000-2020.

#### *Estimated Costs - Proposed Projects, 2000-2005*

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
<b>FULTON</b>								
HICKMAN WATER DEPARTMENT	4.8	30	125					125
FULTON MUNICIPAL WATER SYSTEM	2.5	31	65			2,000	1,275	3,340
<b>TOTAL</b>	<b>7.3</b>	<b>61</b>	<b>190</b>			<b>2,000</b>	<b>1,275</b>	<b>3,465</b>

#### *Estimated Costs - Proposed Projects, 2006-2020*

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
<b>FULTON</b>								
FULTON MUNICIPAL WATER SYSTEM	2.5	25	66					66
HICKMAN WATER DEPARTMENT				75				75
FULTON MUNICIPAL WATER SYSTEM			0	263				263
<b>TOTAL</b>	<b>2.5</b>	<b>25</b>	<b>66</b>	<b>338</b>				<b>404</b>

### PUBLIC WATER SYSTEMS

Fulton County is served by two municipal water systems: the Fulton Municipal Water System, serving about 1,800 customers, and the Hickman Water Department, serving nearly 1,400 customers. Both systems rely on wells as their source of water.

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# WATER SERVICE AREAS

## FULTON COUNTY

Kentucky

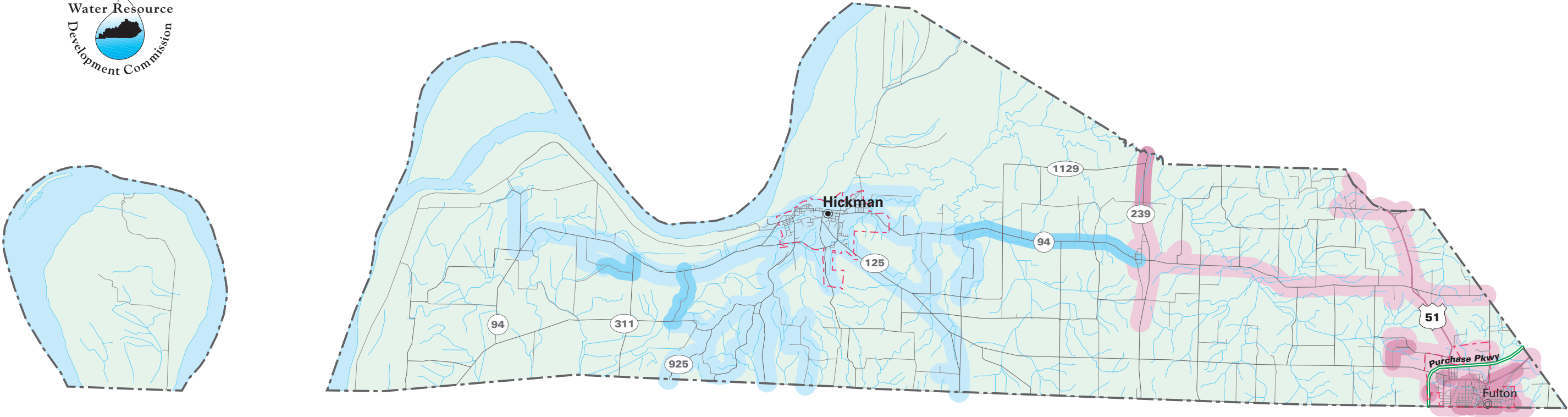
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WATER SERVICE STATUS BY OWNER			
EXISTING SERVICE AREA	PROPOSED SERVICE AREA		
		HICKMAN WATER DEPARTMENT	
		FULTON MUNICIPAL WATER SYSTEM	

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### **FULTON MUNICIPAL WATER SYSTEM**

PWSID: ..... 0380149  
System Type: ..... COMMUNITY  
Owner Type: ..... MUNICIPAL  
Surface Source:  
Purchase Source:  
Well Source: ..... Yes  
Sells Water to:  
Treatment Plant Capacity (MGD): ..... 2.80  
Percent Daily Average Production: ..... 62.00  
Total Tank Storage Capacity (gallons): ..... 1,000,000.00  
Total Service Connections: ..... 1,783.00  
Number of Employees: ..... 5.00  
Treatment Operator Class: ..... 2D  
Distribution Operator Class: ..... 3B  
Customer Rate for 1,000 Gallons: ..... Not available  
O/M costs 1997: ..... Not available  
O/M costs per Service Connection: ..... Not available  
Net Revenue 1997: ..... Not available  
Total Water Produced 1997 (gallons): ..... Not available  
Water Sold 1997 (gallons): ..... Not available  
Unaccounted-for Water 1997 (%): ..... Not available

The system serves 1,783 customers and employs 5 full-time individuals. The Fulton Municipal Water System also serves the communities of Cayce and Crutchfield. The system has two wells that withdraw 750,000 gallons a day. The treatment plant is rated for 2.8 million gallons per day and is processing 705,000 gallons per day. The system has four water tanks that have a combined storage capacity of 1 million gallons.

### **HICKMAN WATER DEPARTMENT**

PWSID: ..... 0380193  
System Type: ..... COMMUNITY  
Owner Type: ..... MUNICIPAL  
Surface Source:  
Purchase Source:  
Well Source: ..... Yes  
Sells Water to:  
Treatment Plant Capacity (MGD): ..... 1.80  
Percent Daily Average Production: ..... 35.00  
Total Tank Storage Capacity (gallons): ..... 500,000.00  
Total Service Connections: ..... 1,374.00  
Number of Employees: ..... 34.00  
Treatment Operator Class: ..... 2D  
Distribution Operator Class: ..... 3A  
Customer Rate for 1,000 Gallons: ..... Not available  
O/M costs 1997: ..... Not available  
O/M costs per Service Connection: ..... Not available  
Net Revenue 1997: ..... Not available  
Total Water Produced 1997 (gallons): ..... Not available

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Water Sold 1997 (gallons):.....	Not available
Unaccounted-for Water 1997 (%): .....	Not available

The City of Hickman Water Department serves 1,374 customers. The city has three wells from which they withdraw 550,000 gallons per day. The treatment plant has a 24-hour rated capacity of 1.8 million gallons per day. Average daily treatment is 540,000 gallons. The treatment plant is operating at 30% capacity. The city maintains three tanks for a total storage of 1,050,000. The Department spends 78% of revenue on operation and maintenance.

## PRIVATE DOMESTIC SYSTEMS

About 700 people in Fulton County rely on private wells for their water supply.

Abundant quantities of ground-water is available for domestic, irrigation, and industrial uses in Fulton County from depths of a few feet down to 1,500 feet. In general, the chemical quality of the water is good, but water from some aquifers contains objectionable amounts of iron and manganese. Water from alluvium is generally hard to very hard with moderate to high levels of dissolved solids. Water from the sand and/or gravel, non alluvium aquifers are considered soft and slightly acidic with low dissolved solids. Yields in some of the deeper wells (250-1,500 feet) are greater than 1,000 gallons per minute which is sufficient for a community or industrial supply.

Water quality generally is good except in areas where downward percolation of surface water and fluids from domestic sewage-disposal systems, and other sources of domestic or industrial pollution have contaminated the aquifer. Ground-water sometimes contains iron naturally in objectionable amounts from the deeper zones. In some formations with slightly acidic ground-water, a chemical reaction between the acidic ground-water and steel well casing and pump equipment will produce a high iron content in the water which is not naturally occurring.

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